A STUDY ON SOTWARE PRODUCT DEVELOPMENT APPROACHES IN THE SRI LANKAN SOFTWARE INDUSTRY

By

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DECLARATION

"I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any University to the best of my knowledge and belief it does not contain any material previously published, written or orally communicated by another person or myself except where due reference is made in the text. I also hereby give consent for my dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and summary to be made available to outside organizations"

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Abstract

Software product development today cannot be regarded as generally successful. Only about one of four software development projects is completed on time and on budget, with all features and functions originally specified *(Christina Wallin, 2005)*. There are a number of software development models followed by the software companies. But all the available software development life cycle models cater to customized software development. They cater to the development of software based on a customers requirement and used by only that customer. Most software companies are either moving into or already in the product business (Generic Software). The task of developing and implementing software products to support complex business processes on time and within budget has been less than satisfactory for many companies and government agencies implementing major information systems. For many organizations, the likelihood of failure is unacceptably high. This suggests that perhaps the traditional approaches and assumptions used in the software development process are inherently flawed. This dissertation attempts to identify the problem areas in projects involving the implementation of software products in Sri Lanka. The problem areas were identified by conducting a survey for a selected sample of thirty from four software companies. As a solution to some of the problems a recommended approach for projects involving delivery of software products is suggested. The recommended approach covers the inception of a project comprising the implementation of a software product to the point where final acceptance is obtained.

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Acronyms

ASD :- Adaptive Software Development

CD-ROM :- Compact Disk – Read Only Memory

DSDM :- Dynamic System Development Method

FDD:- Feature Driven Development

IT :- Information Technology

JAD :– Joint Application Development

OS:- Operating System

MB :- Mega Bytes

MS :– Microsoft

POS:- Point Of Sale

PLC:- Product Life Cycle

RAM:- Random Access Memory

R & D:- Research & Development

RUP :– Rational Unified Process

SDLC :– Software Development Life Cycle

SLC :– Software Life Cycle

UML :- Unified Modeling Language

XP :- Extreme Programming